mine where the code words 3 - 10 start, i.e. almost the whole of the represented audio signal is affected. Thus all the other code words following the disturbed code word cannot be decoded properly either, since it is not known where these code words start and since a false starting point was chosen because of the error.

As a solution to the problem of error propagation European patent No. 0612156 proposes that some of the code words of variable length should be arranged in a raster and the other code words should be assigned to the remaining gaps so that the start of a code word can be more easily identified without complete decoding or in the event of a faulty transmission.

The known method provides a partial remedy for error propagation by resorting the code words. A fixed place in the bit stream is reserved for some code words and the spaces which are left can be occupied by the remaining code words. This entails no extra bits, but prevents error propagation among the resorted code words in the event of an error.

The decisive parameter for the efficiency of the known method is how the raster is defined in practice, i.e. how many raster points are needed, the raster distance between the raster points, etc. However, European patent 0612156 does not go beyond the general proposition that a raster should be used to curtail error propagation; there are no details as to how the raster should be efficiently structured so as to achieve error-tolerant, and at the same time efficient, coding.

EP-A-0 717 503 discloses a digital coding and decoding method in which discrete-time samples of a music signal are transformed into the frequency domain, whereupon the spectral values which are obtained are quantized and then entropy coded. The entropy coding delivers a certain number of code words of

variable length, some of which are arranged in a raster while the others are inserted in the remaining spaces in the raster.

EP-A-0 492 537 relates to an information recording device for video and audio information in which information is divided up into small blocks of pixels, each containing a plurality of pixels, whereupon each small block is converted into orthogonal components by means of an orthogonal transformation. The orthogonal components are then coded using a code having code words of variable length. Some of the coded code words are written into a first memory. If a code word has more bits than are provided for by the first memory, the remaining bits of this code word are written into another memory.

Summary of the Invention

It is the object of the present invention to provide a concept for the error-tolerant and nevertheless efficient coding and decoding of an audio signal or a bit stream.

[This object is achieved by a method for coding an audio signal according to claim 1 or 9, by a device for coding an audio signal according to claim 21 or 22, by a method for decoding a bit stream according to claim 23 or 24 and by a device for decoding a bit stream according to claim 25 or 26.]

In accordance with a first object of the present invention, this object is achieved by a method for coding an audio signal to obtain a coded bit stream, comprising the following steps: transforming a block of discrete-time samples of the audio signal into the frequency domain to obtain a block of spectral values which represent the audio signal; coding the spectral values with a code table having a limited number of code words

of different length to obtain spectral values coded with code words, the length of a code word which is assigned to a spectral value generally being that much shorter the higher the probability of occurrence of the spectral value is; determining a raster for the coded bit stream where the raster has equidistant raster points and where the separation of the raster points depends on the code table; defining priority code words among the code words, those code words which represent spectral values which are psychoacoustically important compared to other spectral values being defined as priority code words; positioning the priority code words in the raster so that the start of a priority code word which represents a spectral value of the block of spectral values coincides with one raster point and the start of another priority code word which represents another spectral value of the block of spectral values coincides with another raster point.

In accordance with a second object of the present invention, this object is achieved by a device for coding an **audio signal** to obtain a coded bit stream, comprising: a unit for transforming a block of discrete-time samples of the **audio signal** into the frequency domain to obtain a block of spectral values which represent the **audio signal**; a unit for coding the spectral values with a code table having a limited number of code words of different lengths to obtain spectral values coded with code words, the length of a code word which is assigned to a spectral value generally being that much shorter the higher the probability of occurrence of the spectral value is; a unit for determining a raster for the coded bit stream where the raster has equidistant raster points and where the separation of the raster points depends on the code table; a unit for defining priority code words among the code words, those code words which represent spectral values which are psychoacoustically important compared to other spectral values being defined as priority code words; and a unit for positioning the